

CLAIMS AMENDMENTS

Please cancel claim 22, without prejudice.

Please amend the claims as follows:

Claims 1-20 (cancelled)

21. (previously amended) An isolated nucleic acid encoding a soluble leptin receptor polypeptide which is OB-Re (SEQ ID NO:10), or allelic variants thereof.

Claim 22 (cancelled)

Claim 23 (cancelled)

24. (currently amended) An isolated DNA molecule encoding on expression a soluble leptin receptor polypeptide selected from the group consisting of:

- a. a DNA molecule of SEQ ID NO: 9;
- b. a DNA molecule complementary to the DNA molecule defined in (a); and
- ~~e. a DNA molecule which hybridizes under moderate stringency conditions to the DNA molecule of (a) or (b), or a hybridizable fragment thereof which encode on expression a soluble leptin receptor;~~
- ~~d. a DNA molecule which is amplifiable with a polymerase chain reaction (PCR) probe selected from group consisting of a probe for clone 7 (forward primer SEQ ID NO:42 and reverse primer SEQ ID NO:43), a probe for clone 11 (forward primer SEQ ID NO:44 and reverse primer SEQ ID NO:45), and both clone 7 and clone 11; and~~
- e. c. a DNA molecule that codes on expression for the soluble leptin receptor polypeptide encoded by any of the foregoing DNA molecules.

Claim 25 (cancelled)

26. (original) The DNA molecule of claim 24 which is murine.

27. (currently amended) The DNA molecule of claim 24, which codes on expression for a polypeptide selected from the group consisting of:

- a) a leptin receptor selected from the group consisting of OB-Re (SEQ ID NO:10), or allelic variants thereof; and
- b) a leptin receptor ~~comprising~~ consisting essentially of amino acids 28-805 of SEQ ID NO:10.

28. (previously amended) An isolated nucleic acid molecule having a nucleotide sequence corresponding or complementary to the DNA sequence set forth in SEQ ID NO: 9.

Claim 29 (cancelled)

Claim 30 (cancelled)

Claim 31 (cancelled)

Claim 32 (cancelled)

Claim 33 (cancelled)

34. (currently amended) The nucleic acid of claim 21, 24, ~~22~~ or 67 which is DNA.

35. (original) A vector comprising the DNA of claim 34.

36. (original) A vector comprising the DNA of claim 24, 27, or 28.

37. (original) An expression vector which comprises the DNA of claim 34, operatively associated with an expression control sequence.

38. (original) An expression vector which comprises the DNA of claim 24, 27, or 28, operatively associated with an expression control sequence.

39. (original) An unicellular host transformed or transfected with a DNA molecule of claim 34.

40. (original) An unicellular host transformed or transfected with a DNA molecule of claim 24, 27, or 28.

41. (original) An unicellular host transformed or transfected with an expression vector of claim 37.

42. (original) An unicellular host transformed or transfected with an expression vector of claim 38.

43. (original) The unicellular host of claim 41 selected from the group consisting of bacteria, yeast, mammalian cells, plant cells, and insect cells, in tissue culture.

44. (original) The unicellular host of claim 42 selected from the group consisting of bacteria, yeast, mammalian cells, plant cells, and insect cells, in tissue culture.

45. (original) The unicellular host of claim 43, wherein the unicellular host is selected from the group consisting of *E. coli*, *Pseudomonas*, *Bacillus*, *Streptomyces*, *Saccharomyces*, *Pichia*, *Candida*, *Hansenula*, *Torulopsis*, CHO, R1.1, B-W, LM, COS 1, COS 7, BSC1, BSC40, BMT10, and Sf9 cells.

46. (original) The unicellular host of claim 44, wherein the unicellular host is selected from the group consisting of *E. coli*, *Pseudomonas*, *Bacillus*, *Streptomyces*, *Saccharomyces*, *Pichia*, *Candida*, *Hansenula*, *Torulopsis*, CHO, R1.1, B-W, LM, COS 1, COS 7, BSC1, BSC40, BMT10, and Sf9 cells.

47. (original) A method for preparing a leptin receptor polypeptide comprising:
a) culturing a cell according to any claim 43 under conditions that provide for expression of the leptin receptor polypeptide; and
b) recovering the expressed polypeptide.

48. (original) A method for preparing a leptin receptor polypeptide comprising:
a) culturing a cell according to any claim 44 under conditions that provide for expression of the leptin receptor polypeptide; and
b) recovering the expressed polypeptide.

Claim 49 (cancelled)

Claim 50 (cancelled)

51. (original) A transgenic vector comprising a DNA molecule of claim 34.

52. (original) A transgenic vector comprising a DNA molecule of claim 24, 27, or 28.

Claim 53 (cancelled)

Claim 54 (cancelled)

Claim 55 (cancelled)

Claim 56 (cancelled)

Claim 57 (cancelled)

Claim 58 (cancelled)

Claim 59 (cancelled)

Claim 60 (cancelled)

Claim 61 (cancelled)

Claim 62 (cancelled)

Claim 63 (cancelled)

Claim 64 (cancelled)

Claim 65 (cancelled)

Claim 66 (cancelled)

67. (currently amended) ~~An~~ The isolated nucleic acid ~~of claim 22 wherein said~~ encoding a soluble leptin receptor selected from the group consisting of
- a) OB-Re (SEQ ID NO:10), or allelic variants thereof; and
 - b) a leptin receptor ~~comprising~~ consisting essentially of amino acids 28-805 of SEQ ID NO:10 or allelic variants thereof.

Claim 68 (cancelled)